SUBJECT: Trip Report: AAP Experiment Data Handling - Case 620

DATE: February 28, 1968

FROM: R. J. Pauly

MEMORANDUM FOR FILE

Unclas /17 11116

The author met with Messrs. J. P. Shaughnessy and F. Kalil of the Goddard Space Flight Center (GSFC) Manned Flight Planning and Analysis Division on February 14, 1968. The purpose of the visit was to discuss the handling of AAP experiment data by the Manned Space Flight Network (MSFN).

Highlights of the discussion are presented below:

- 1. The PCM telemetry data transmitted via four links from AAP1-2 or six links from AAP2-3-4, could be recorded at each MSFN site on one high-speed tape recorder operating at 120 inches per second. One tape containing up to 15 minutes of data would be recorded during each contact between the AAP cluster and a ground site. An additional low-speed tape would be required for each contact to record other support data such as voice data.
- 2. Based on experience in the Apollo Program, an unconditioned bit stream and a conditioned bit stream would be recorded for each PCM telemetry link. The unconditioned bit stream would be recorded from the output of the PCM demodulator and the conditioned bit stream would be recorded from the output of the PCM decommutator.
- 3. The 2.4 KBPS high-speed data circuits will be replaced by 4.8 KBPS high-speed data circuits.
- 4. The Johns Hopkins University Applied Physics
 Laboratory is performing a data compression study
 for GSFC. A copy of the preliminary study report,
 "Preliminary Results of Data Compression Feasibility
 Study" was obtained by the author.



